Chapter 2.5 Routine inspections

1. Applicability of this chapter

You are required to follow this chapter if you work at JSC or a JSC field site. Paragraph 14 of this chapter lists the responsibilities of facility managers, line managers, contractor safety representatives, the Safety and Test Operations Division, and the Clinic Services Branch.

2. Description of Sub-element 2.5

JSC shall have a system for routinely inspecting selected work areas monthly so as to cover the entire site quarterly. This routine inspection:

- a. Is done by employees trained in recognizing hazards and may include other employees.
- b. Follows written procedures or guidance.
- c. Results in written reports of findings.
- d. Tracks hazard elimination or control to completion.

3. Purpose of safety, fire, and health inspections and evaluations

Safety and health inspections and evaluations identify hazards in the workplace so they can be corrected.

4. Safety, fire, and health inspections and evaluations at JSC

This table lists the kinds of safety, fire, and health inspections and evaluations JSC does. Inspections shall look for safety, fire, and health hazards unless otherwise noted.

What kind?	Who does them?	How often?
Construction area self-inspections to find hazards	 Construction company managers and employees Directorate safety and health committee members 	 Weekly Monthly by directorate safety and health committee members
Regular safety, fire, and health inspections to find hazards	Safety and Test Operations DivisionClinic Services Branch	Yearly, or more often if necessary

What inspections?	Who does them?	How often?
Director walkthroughs	Organizational directors	Twice a year
Facility manager walk- throughs to inspect for safety, health, and fire hazards	 Facility managers are responsible for making sure their buildings are inspected Managers responsible for the work area, and employees in the work area may also participate or do separate inspections 	Inspect a few areas monthly and cover the entire building quarterly
Special inspections and surveys to look at suspected hazards	 Safety and Test Operations Division Clinic Services Branch 	As requested by safety and health committees, employee representatives, or employees After an employee complaint
Unannounced inspections to find hazards	 Safety and Test Operations Division Clinic Services Branch 	As needed
Follow-up inspections to make sure hazards are corrected	Safety and Test Operations DivisionClinic Services Branch	As necessary to make sure hazards are corrected
Baseline surveys get a baseline on hazards of new and newly acquired facilities, processes, materials, or equipment	 Operational readiness inspections User readiness reviews Informal survey teams Safety, fire, and health professionals 	Before the new or newly acquired facilities, processes, materials, and equipment are used

5. Fire risk surveys

The Safety and Test Operations Division surveys all JSC work areas and operations periodically, or when a facility is built or modified. The fire risk survey isn't intended to be an all-encompassing engineering survey, but will try to find obvious fire hazards with normal facility operations. The survey shall look at areas such as:

- a. Exit routes and posted facility evacuation plans.
- b. Manual and automatic fire detection systems.
- c. Manual and automatic fire suppression equipment.
- d. Heating, ventilation, and air conditioning systems, if accessible.
- e. Normal and emergency lighting systems and power systems.
- f. Separation and protection of hazardous operations and material.
- g. Elevators.
- h. The adequacy and reliability of the water supply.

- i. Fire department response.
- j. Alarm monitoring equipment.
- k. Emergency procedures to include Emergency Action Plans.
- 1. Existing fire risk analysis and inspection results.
- m. Other fire safety features as deemed necessary.

NOTE: For correcting deficiencies, see also Chapters 3.2, "Hazard Elimination and Control," and 3.5, "Hazard Correction Tracking," of this Handbook.

6. Inspections of inactive work areas or equipment

For inactive work areas or equipment, you shall:

- a. Inspect inactive work areas or equipment at least yearly.
- b. Hold a thorough readiness review to identify hazards and take necessary actions to correct all hazards if you plan to reactivate inactive work areas or equipment.

7. Preparing for an inspection

As a line manager, whether you are doing a self-inspection or being inspected by someone else, you shall:

- a. Gather and review all safety, fire, and health information such as safety, fire, and health procedures, injury and illness records, previous inspection reports, hazard reports, and corrective action reports. Give outside inspectors the results from your last self-inspection.
- b. Decide what you will inspect. You may restrict your own inspections to only areas where your employees work. Suggest what areas to inspect to outside inspectors.
- c. Stop operations that could be hazardous to those on the inspection.
- d. Provide special passes or badges for outside inspectors if necessary. Make arrangements with the Security Branch ahead of time if needed.
- e. Provide necessary personal protective equipment to your employees who go on the inspection. Tell outside inspectors what personal protective equipment they need to bring such as hard hats, safety shoes, or respirators before the inspection if possible. Provide outside inspectors with personal protective equipment that is unique to your work area such as gloves or suits. Everyone on the inspection shall use personal protective equipment as required.
- f. Arrange for employee representatives to participate. Employee representatives aren't required, but shall be given the opportunity to participate.
- g. Employees or employee groups shall have the opportunity to choose employee representatives.

8. Inspections by individuals or small teams

To do a self-inspection:

- a. Find all the safety, fire, and health hazards you can by:
 - 1. Using checklists you develop or checklists from the Safety and Test Operations Division or the Clinic Services Branch.
 - 2. Using standards from this Handbook, NASA requirements, or OSHA requirements.
 - 3. Questioning any condition you think may cause a mishap.
- b. Question employees in the work areas about safety, fire, and health matters.
- c. Keep records of your inspections, and track the hazards to closure. Records shall include at least the following information:
 - 1. What hazards you find
 - 2. When and where (building and room) you found them
 - 3. What actions you take to correct the hazards
 - 4. When you correct each hazard
- d. Correct hazards on the spot, if possible.
- e. Ask the Safety and Test Operations Division or the Clinic Services Branch for a special inspection or industrial hygiene survey for things you aren't sure of.
- f. Tell all employees the inspection results.
- g. Correct all hazards within a reasonable amount of time as described in Chapter 3.5.

Certified industrial hygienists, certified safety professionals, professional engineers, and other safety, fire, and health professionals are available to help you with inspections and hazard correction as needed.

9. Inspections by the Safety and Test Operations Division or the Clinic Services Branch

Safety, fire, and health inspectors are authorized to enter any work area that isn't hazardous to themselves or your employees. You shall cooperate with safety and health inspectors when they enter your work areas. They have the right to refuse to allow anyone to accompany them who would interfere with a fair and orderly inspection. Safety, fire, and health inspectors shall follow any special procedures you have for entering your work areas. The inspectors:

a. Review safety, fire, and health information before the inspection, or ask for it when they arrive.

- b. Bring the materials and equipment they need for the inspection such as checklists, personal protective equipment, and monitoring equipment. They won't bring any personal protective equipment that is unique to your work area.
- c. Hold an opening conference to tell managers and employees what they plan to inspect. They may inspect an entire building or work area, or just a part of a work area.
- d. Keep records on their findings. They will note any hazards corrected on the spot and make sure inspection records reflect the corrections.
- e. Interview employees and managers in the work areas. Employees interviewed have the right to bring any hazards to the attention of the inspectors.
- f. Tell the manager in charge of a work area about any condition that they reasonably expect could cause death or serious injury immediately. That manager shall correct the condition immediately or take temporary measures to protect his or her employees.
- g. Hold an exit conference to discuss the inspection results with managers and employees.
- h. Send the manager in charge and the facility manager a written report on the inspection that will include the procedures followed for the inspection and findings. Include any conditions that require a JSC Form 1240, "JSC Notice of Safety or Health Hazard and Action Plan," as described in Chapter 3.5. Reports on safety inspections are sent within 15 days. Reports on health inspections or surveys are sent within 30 days after completion.
- i. Track open hazards in the Hazard Abatement Tracking System kept by the Safety and Test Operations Division. See Chapter 3.5 for more details.

10. Follow-up to an inspection

After you, as a manager, finish the exit conference of an inspection, you shall:

- a. Tell all employees the inspection results.
- b. Develop action plans to correct all hazards within a reasonable amount of time as described in Chapter 3.5.
- c. Post JSC Form 1240 after you get the written report. Keep each form posted for at least 3 days or until the hazard is corrected.

11. Inspections by OSHA, National Institute for Occupational Safety and Health (NIOSH), or the Nuclear Regulatory Commission (NRC)

When OSHA, NIOSH, or NRC representatives come to inspect JSC work areas, JSC shall:

- a. Allow them to enter any JSC workplaces, whether occupied by government or contractor employees, to inspect or evaluate workplace conditions. The Security Branch will handle access to secure areas.
- b. Require them to show identification, and receive any necessary security clearances.

- c. Give the inspectors:
 - 1. Safety, fire, and health information on the worksites they will visit
 - 2. Photographic support, as needed and if available
- d. Arrange for them to interview employees during their visit.
- e. Escort them during their visits. The following persons shall escort them:
 - 1. Representatives of any contractors who work in the work area to be inspected
 - 2. A representative from the Clinic Services Branch for NIOSH visits and OSHA visits that involve health issues
 - 3. A representative of the Safety and Test Operations Division for OSHA visits; a representative of the Safety and Test Operations Division may also escort NIOSH visitors
 - 4. A representative from the Radiation Safety Office for NRC, NIOSH, or OSHA visits that involve radiation issues
 - 5. A manager or employee representative from the work area to be inspected
- f. Keep OSHA and NIOSH reports on civil service employee areas at the Safety and Test Operations Division or the Clinic Services Branch.
- g. Notify NASA Headquarters Safety and Mission Assurance, the Chief Health and Medical Officer, and the Designated Agency Safety and Health Official of any impending inspections or investigations, and send the results of the inspection to NASA Headquarters Safety and Mission Assurance.

12. OSHA or NIOSH inspections of contractor areas

You shall provide the following to the Safety and Test Operations Division and the Clinic Services Branch within 10 working days after you get the OSHA or NIOSH report:

- a. A copy of the report
- b. A summary of any findings
- c. A summary of actions you will take to correct the findings

13. For more information on safety and health inspections

You can find more information on safety and health inspections in these documents:

- a. 29 CFR 1910, "Occupational Safety and Health Standards, General Industry"
- b. 29 CFR 1926, "Occupational Safety and Health Standards, Construction Industry"
- c. 29 CFR 1960, "Basic Program Elements for Federal Employee Occupational Safety and Health Programs and Related Matters"

d. *A Strategy for Occupational Exposure Assessment*, Editor Neil C. Hammond, American Industrial Hygiene Association, Akron, Ohio, 1991

14. Responsibilities

Responsibilities for safety, fire, and health inspections are as follows:

- a. As a JSC *facility manager*, you are responsible for:
 - 1. Making sure that self-inspections are done in your building as described in paragraphs 4, 5, 6, and 7 above. You may count inspections by line managers or employees. This includes making sure documentation of the inspections is available.
 - 2. Doing a complete safety walkthrough of your building at least once a year to inspect for safety, health, and fire hazards. You may fulfill this by accompanying Safety and Test Operations Division personnel on their annual inspections.
 - 3. Making sure action is taken on all inspections as described in paragraph 10 above.
- b. As a JSC *line manager*, you are responsible for:
 - 1. Making sure that self-inspections are done in your work areas as described in paragraphs 4, 5, 6, and 7 above. You may count inspections by line managers or employees. This includes making sure documentation of the inspections is available.
 - 2. Making sure action is taken on all inspections as described in paragraph 10 above.
 - 3. Involving employees in safety and health inspections.
- c. As a *contractor safety representative*, you are responsible for helping contractor or NASA safety and health inspections as necessary.
- d. The *Safety and Test Operations Division* and the *Clinic Services Branch* are responsible for:
 - 1. Having qualified safety, fire, and health inspectors.
 - 2. Making sure safety and health inspectors have enough documented training and experience in finding, evaluating, and correcting hazards.
 - 3. Noting health issues during safety inspections and reporting them to the Clinic Services Branch.
 - 4. Noting safety issues during health inspections and reporting them to the Safety and Test Operations Division.
 - 5. Notifying NASA Headquarters, Office of Safety and Mission Assurance, of OSHA or NIOSH inspections or investigations of JSC or contractor operations.

15. Safety and health records

The following records will document safety and health inspections:

Part 2, Worksite analysis

- a. Center-level records The Safety and Test Operations Division and the Clinic Services Branch shall keep records of annual inspections and track findings in the Hazard Abatement Tracking System.
- b. Organizational-level records As a facility manager or line manager, keep records of your inspections and make sure the inspections are recorded in the Building Inspection Tracking System or equivalent system for your organization. Inspection records shall include:
 - 1. Date and time of the inspection.
 - 2. Areas or rooms inspected.
 - 3. A list of participants.
 - 4. Findings and actions taken. You may document the findings and actions in a tracking system or database.
- c. Organizational-level records JSC Form 1240 that are posted in work areas to inform employees of hazards.

16. Measurement

JSC measures routine inspections by whether all work areas are inspected at least quarterly.